Nithish SureshBabu

Lynnwood, WA

(206) 226-8935 | nithish952001@gmail.com | linkedin-nithish-suresh-babu nithish-95 | nithish.net

SUMMARY

Software Engineer specializing in full-stack development and scalable system design, with a focus on AI integration and real-time systems. Recognized for delivering impactful projects such as a low-latency chat platform and an AI-enhanced fish encyclopedia app increasing user engagement by 30%. Proficient in Go, Python, and AWS, eager to leverage skills to drive technological innovations in the healthcare or startup ecosystems. Committed to contributing to forward-thinking teams to achieve cutting-edge advancements.

EDUCATION

University of Michigan Aug 2023 - Apr 2025

Master of Science, Computer and Information Science (GPA: 3.8)

Michigan, USA

Anna University Jul 2018 - May 2022 Bachelor of Technology, Computer Science and Engineering (GPA: 3.4)

Chennai, INDIA

EXPERIENCE

Central Marine Fisheries Research Institute

Jan 2025 - Jul 2025

Software Developer

- Developed and maintained full-stack web and mobile applications using Vue.js, Flutter, and Go, enabling over 100 researchers and students to access real-time marine data even under low connectivity conditions.
- Implemented robust data synchronization protocols that automatically updated databases as connectivity was re-established, ensuring continuous and reliable data access.

University of Michigan - Deep Fake Research Lab

Sep 2024 - Dec 2024

Research Assistant - GenAI (Volunteer)

Collaborated with academic experts to design and validate deepfake detection models using TensorFlow, achieving 88.37% accuracy by benchmarking 8 models across diverse Gen-AI image generation datasets.

• Utilized advanced machine learning techniques to refine model performance and contributed to research advancements in AI-driven security.

University of Michigan - Digital Forensics Course

Aug 2024 - Dec 2024

Computer Science Grader

Assessed student projects and provided constructive feedback on digital forensics and coding principles, reinforcing robust software development practices.

• Collaborated with instructors to refine course materials, fostering an agile learning environment and enhancing students' practical application skills.

PROJECTS

College Event Management App | localVibes web v0.1

Jul 2025 - Present

• Streamlined event coordination for college students by building a Event Hosting full-stack web application using Vue.js, Go with Chi, and PostgreSQL with real-time group chat creation, achieving positive feedback from 20+ beta testers and boosting campus engagement.

Chat Application | chat-webapp

Jan 2024 - Apr 2024

• Designed a scalable chat platform for an Advanced OS course project inspired by Discord using Go, WebSockets, and implementing consistent hashing and rate limiting across 8 nodes, which enabled real-time communication for 30+ testers and demonstrated potential to scale to 2,500+ users. deployed on AWS with Docker and CI/CD, supporting clients with low as 10ms latency and 40% faster deployment.

Tweets Sentiment Analysis

• Developed a high-performance sentiment analysis engine for an Introduction to Big Data course by leveraging Llama-2, LangChain, Apache Spark, and AWS to process 10,000+ tweets/hour with 92.2% accuracy, delivering real-time insights via a responsive dashboard and reducing processing time by 30%.

SKILLS

- Languages: Go, Python, JavaScript, TypeScript, C++
- Full Stack: Full-stack Web Development, Go Chi, FastAPI, Tailwind CSS, RESTful APIs, Flutter, React Native, Vue.js, Next.js, gRPC,
- Cloud & Tools: AWS, Google Cloud, Docker, Kubernetes, Git
- DevOps & Agile: CI/CD Pipelines, Agile Practices
- AI/ML: PyTorch, TensorFlow, LangChain, AWS Rekognition
- Databases: PostgreSQL, DynamoDB, SQLite, S3, Redis
- Systems: System design, Operating System, Performance optimization, debugging, large-scale design, Distributed Systems

AWARDS AND RECOGNITIONS

- People's Choice of the Year, Google Developer's Club (GDC), 2025 | Awarded for developing an AI-powered Insurance Quoting Call Agent with natural speech and advanced conversation handling.
- Top 80 in National Wide India, Vishwakarma Award, 2020 | Recognized for innovative technical project in a nationwide competition.